

REMARKS/ARGUMENTS

Prior to entry of this Amendment, claims 1-10 were pending in the application. After entry of this Amendment, claims 1-5 and 7-10 are pending in the application.

In the Amendment, claim 1 is amended to better define the claimed invention by adding the recitations “heating” and “the applicator further comprising two parallel feed slots in a top wall of the applicator connecting the microwave enclosure to a TE10 waveguide, and a metal post arranged at a centerline of the waveguide between the feed slots.” Claim 1 is also amended to improve clarity, as are claims 2-5 and 7-10. Additionally, claim 6 is canceled, without prejudice to or disclaimer of the subject matter of that claim. No new matter is introduced.

Office Action

In the Office Action, the Examiner rejected claims 1, 4, and 5 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,518,857 B1 to Hattori et al. (“Hattori”); rejected claims 2 and 6-8 under 35 U.S.C. § 103(a) as being unpatentable over Hattori in view of U.S. Patent No. 3,605,101 to Kolettis et al. (“Kolettis”); and rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Hattori in view of U.S. Patent No. 5,935,190 to Davis et al. (“Davis”).

The Examiner also indicated that claims 9 and 10 were objected to, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Allowable Subject Matter

Applicant gratefully acknowledges the Examiner’s statement that claims 9 and 10 would be allowable. However, Applicant does not rewrite claims 9 and 10 at this time because Applicant believes that claims 9 and 10, as amended, are allowable, as discussed below.

Claim Rejections Under 35 U.S.C. § 102(b)

Applicant submits that Hattori is directed to communications. As a result, it does not disclose a microwave heating applicator, as recited in amended claim 1. For at least this reason, Hattori does not anticipate claim 1.

Applicant also submits that Hattori does not disclose “a main power-transferring TE_{m₁n} mode with a long vertical wavelength is enhanced, and a significant amplitude of a complementary TE_{m₂n} mode is created, wherein m₁, m₂, and n are positive odd integers and m₂ and n are both less than or equal to m₁-2” and, thus, Hattori does not anticipate claim 1 for at least this reason, too.

Additionally, as effectively admitted in the Office Action, Hattori does not disclose “the applicator further comprising two parallel feed slots in a top wall of the applicator connecting the microwave enclosure to a TE₁₀ waveguide, and a metal post arranged at a centerline of the waveguide between the feed slots.” For at least this reason as well, Hattori does not anticipate claim 1.

Applicant further submits that Hattori does not anticipate any of dependent claims 2-5 or 7-10, at least for the same reasons that Hattori does not anticipate claim 1.

Claim Rejections Under 35 U.S.C. § 103(a)

Applicant submits that Kolettis is directed to communications and Davis to traffic monitoring. Thus, to the extent that either of these references could be combined with Hattori, neither of these combinations would disclose a microwave heating applicator, as recited in amended claim 1. For at least this reason, claim 1 is patentable over Hattori in view of Kolettis and Hattori in view of Davis.

Applicant also submits that neither Kolettis nor Davis discloses “a main power-transferring TE_{m_1n} mode with a long vertical wavelength is enhanced, and a significant amplitude of a complementary TE_{m_2n} mode is created, wherein m_1 , m_2 , and n are positive odd integers and m_2 and n are both less than or equal to m_1-2 .” In particular, the disclosure of Kolettis appears to be substantially limited to HE_{11}^o , TE_{11}^o , and TM_{11}^o modes. Thus, claim 1 is patentable over Hattori in view of Kolettis and Hattori in view of Davis for at least this reason, too.

Additionally, as effectively admitted in the Office Action, neither Kolettis nor Davis discloses “the applicator further comprising two parallel feed slots in a top wall of the applicator connecting the microwave enclosure to a TE10 waveguide, and a metal post arranged at a centerline of the waveguide between the feed slots.” For at least this reason as well, claim 1 is patentable over Hattori in view of Kolettis and Hattori in view of Davis.

Applicant further submits that dependent claims 2-5 and 7-10 also are patentable over Hattori in view of Kolettis and Hattori in view of Davis, at least for the same reasons that claim 1 is patentable over Hattori in view of Kolettis and Hattori in view of Davis.

Request for Reconsideration and Allowance

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of each of claims 1-5 and 7-10 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; in particular, extension of time fees.

Respectfully submitted,

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By

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